

Appl. No. 09/663,582

Amendment Dated May 14, 2004

Reply to Office Action of January 16, 2004

Remarks:

Reconsideration of the application is requested. Claims 1, 3-7, and 9-68 remain in the application. Claims 5-6 have been amended. Claims 23-66 were previously withdrawn.

In item 4 of the above-identified Office action, the Examiner has rejected claims 5 and 6 as being indefinite under 35 U.S.C. § 112, second paragraph.

More specifically, the Examiner has stated that the phrase "at least one of" was unclear. Claims 5 and 6 have been amended to remove this passage. The claims now use more familiar Markush group. Accordingly, the new passage is definite.

The Examiner also rejected the claims as not clearly defining of what the ceramic matrix consisted. The claims have been amended. The ceramic matrix consists of phases of silicon, carbon, silicon carbide, and a phase. Amended claims 5 and 6 are therefore definite.

Support for the changes to claims 5 and 6 can be found in the specification at page 12, lines 11-17; and page 15, line 23, through page 16, line 4.

Accordingly, the specification and the claims meet the requirements of 35 U.S.C. § 112, second paragraphs. Should

Appl. No. 09/663,582  
Amendment Dated May 14, 2004  
Reply to Office Action of January 16, 2004

the Examiner find any further objectionable items, counsel would appreciate a telephone call during which the matter may be resolved. The changes are neither provided for overcoming the prior art nor do they narrow the scope of the claim for any reason related to the statutory requirements for a patent.

In item 6 of the Office action, the Examiner rejected claims 1, 3-7, 9-22, and 67-68 under the judicially create doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 6,537,654. As will be explained below, the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references.

Before discussing the prior art in detail, a brief review of the invention as claimed is provided. Claims 1, 5, and 6 call for, *inter alia*, a composite material having the following features:

...fiber bundles having two different fractions including a reinforcing fiber bundle fraction and a matrix fiber bundle fraction having lengths with different averages, each of said fiber bundles having a weight, said weights being proportional to said fiber bundle lengths, said weights being plotted to a graph of weight distribution versus fiber bundle length, said graph exhibiting a minimum between a first part of said distribution graph relating to said reinforcing fiber bundle fraction and a second part of said distribution graph relating to said matrix fiber bundle fraction...

Appl. No. 09/663,582  
Amendment Dated May 14, 2004  
Reply to Office Action of January 16, 2004

While Gruber et al. '654 is also directed to fiber reinforced ceramics based on carbon fibers, and a matrix comprising phases of silicon carbide, as is the instant application, there is no mention of the distinguishing feature of the instant application: i.e. the presence of carbon fibers with the fiber bundle length distribution as claimed in the instant application. See especially independent claims 1, 5, and 6.

Section 2143.03 of the MPEP states, "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggest by the prior art. *In re Royka*, 180 USPQ 580 (CCPA 1974)."

In this case, the cited prior art (Gruber et al. '654) fails to teach or suggest all of the features of the invention as claimed: specifically, the bimodal distribution. Accordingly, the invention as claimed is not obvious in light of the prior art. Therefore claims 1, 5, and 6 are not obvious over Gruber et al.

Furthermore, according to MPEP §2143.03 and *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988), "If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. Accordingly, claims 3-4, 7, 9-22, and 67-68 are also nonobvious.

Appl. No. 09/663,582  
Amendment Dated May 14, 2004  
Reply to Office Action of January 16, 2004

In view of the foregoing, reconsideration and allowance of claims 1, 3-7, 9-22, and 67-68 are solicited. In the event the Examiner should still find any of the claims to be unpatentable, please telephone counsel so that patentable language can be substituted.

Petition for extension is herewith made. The extension fee for response within a period of one month pursuant to Section 1.136(a) in the amount of \$110 in accordance with Section 1.17 is enclosed herewith.

Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,



---

LOREN DONALD PEARSON  
Reg. No. 42,987  
LERNER & GREENBERG, P.A.  
P.O. Box 2480  
Hollywood, FL 33022-2480  
Tel: (954) 925-1100  
Fax: (954) 925-1101